

REMARKS

This is intended as a full and complete response to the Office Action dated May 14, 2007, having a shortened statutory period for response set to expire on August 14, 2007, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 30-31, and 33-58 remain pending in the application and are shown above. Claim 32 has been cancelled by Applicant without prejudice and claims 33-36, 38, 46 and 47 stand withdrawn by the Examiner. Claims 30-32, 37, 39-45 and 48-58 stand rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 30, 42, 50, and 56 are amended to clarify the invention. Claim 30 is amended to include all the limitations from claim 32. Claims 44 and 48 are amended to correct matters of form. Applicant submits that no new matter has been introduced in this amendment.

Claim Rejections – 35 U.S.C. § 103

Claim 32 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jenkins* in view of *Kim et al* (U.S. Pat. 6,636,288, hereafter *Pat'288*). Applicant respectfully submits that this rejection is rendered moot in view of cancellation of claim 32.

Claims 30-31, 37, 39-41, 42-45, 48-52 and 55-58 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jenkins et al* (U.S. Pat. 6,437,596, hereafter *Jenkins*). Applicant respectfully traverses this rejection.

Jenkins discloses a test apparatus configured to provide a flexible interface between a testing system and a display array being tested so that the testing system

can be used to test various display arrays (Abstract). *Jenkins* further discloses that the test apparatus includes gate lines 16, data lines 18, probe pads 21, 23 and select logic 17, 19. (Figure 1(A), column 2 line 37 – column 3 line 45). *Jenkins* also discloses that the test apparatus is formed in the same substrate 10 with the display array 12 and the test apparatus is to be broke off the substrate 10 from the display array 12 which is further integrated for normal operation (column 5 lines 29-38). Therefore, *Jenkins* does not teach or suggest claimed subject matter. Particularly, *Jenkins* does not teach or suggest a drive electronics comprises a drive circuit, a first arrangement of contact areas for picture generation during normal operation, and a second arrangement of contact areas for testing.

Regarding claim 30, the Examiner asserts that *Jenkins* discloses claimed subject matter except that contact areas of a second arrangement are larger than the contact areas of a first arrangement. Applicant respectfully disagrees with the Examiner's assertion. Particularly, the Examiner asserts that *Jenkins* teaches a drive circuit in element 19. In fact, element 19 of *Jenkins* is data line select/hold circuitry (column 3, lines 25-26). Instead, *Jenkins* discloses that drive modules 34, 44 for testing are included in a tester system (Figure 1(A), column 10 lines 23-48).

Additionally, in rejecting claim 32, which is now incorporated in claim 30, the Examiner agrees that *Jenkins* fails to teach or suggest that a first arrangement of contact areas serves for picture generation during normal operation. However, the Examiner argues that it is obvious to use the first arrangement of contact areas during normal operation in view of column 1, lines 35-38 of *Pat'288*. *Pat'288* discloses a design of liquid crystal display. However, *Pat'288* does not teach or suggest a drive electronics, or a drive circuit as set forth in the pending claims. The cited passage, in fact, teaches that gate and data pads are directly connected to external driving circuits. Therefore, neither *Jenkins* nor *Pat'288* teaches a drive electronics having contact areas connected to an input terminal of a drive circuit. Thus, the combination of *Jenkins* and *Pat'288* does not teach or suggest subject matter set forth in claim 30.

Accordingly, *Jenkins* and *Pat'288*, alone or in combination, do not teach or suggest a drive electronics for driving an optoelectronic device with a matrix of picture elements comprising a drive circuit, wherein the drive circuit comprises input terminals

and output terminals, a first arrangement of contact areas connected with the input terminals of the drive circuit, wherein the first arrangement of contact areas serves for picture generation during operation, and a second arrangement of contact areas connected with the input terminals of the drive circuit directly or via another component, wherein the contact areas of the second arrangement of contact areas are larger than the contact areas of the first arrangement of contact areas, and the second arrangement of contact areas serves for pattern generation during test mode, as recited in amended claim 30, and claims dependent thereon.

Thus, claims 30-31, 37, 39, 40-41, 49, and 58 are in condition for allowance.

Regarding claim 42, *Jenkins* does not teach or suggest an arrangement of a test contact areas connected to a drive circuit, wherein the drive circuit is provide with signals via an arrangement of operational contact areas during normal operation.

Therefore, *Jenkins* does not teach or suggest an arrangement of test contact areas for an optoelectronic device comprising a matrix of picture elements comprising at least one pad, at least one connection of the at least one pad with a drive circuit directly or via another component, wherein the drive circuit is provided with signals via an arrangement of operational contact areas during normal operation, wherein the arrangement of test contact areas are larger than the arrangement of operational contact areas, and the arrangement of test contact areas is configured for providing signals for generating a test pattern during test, as recited in amended claim 42, and claims dependent thereon.

Thus, claims 42-45 and 48 are in condition for allowance.

Regarding claim 50, *Jenkins* does not teach or suggest a method for testing an optoelectronic device comprising a) making contact between an external control and an arrangement of test contact areas which are larger than operational contact areas, b) providing an input terminal of a drive circuit directly or via another component with input signals via the arrangement of test contact areas to generate a test pattern on a matrix of picture elements, wherein the drive circuit is provided with signals for picture generation during operation via the operational contact areas connected to the input terminal of the drive circuit, and c) testing the picture elements of the matrix of picture elements, as recited in amended claim 50, and claims dependent thereon.

Thus, claims 50-52, and 55 are in condition for allowance.

Jenkins also does not teach or suggest a method for manufacturing a drive electronics of an optoelectronic device having a matrix of picture elements, comprising, a) providing a drive circuit, b) connecting control lines of the matrix of picture elements with output terminals of the drive circuit, c) providing a first arrangement of contact areas, wherein the first arrangement of contact areas provides signals to the drive circuit during operation mode, d) connecting the first arrangement of contact areas with input terminals of the drive circuit, e) providing a second arrangement of contact areas, said second arrangement of contact areas being larger than the contact areas of said first arrangement of contact areas, wherein said second arrangement of contact areas serve for pattern generation during test mode, and f) connecting the second arrangement of contact areas with input terminals of the drive circuit directly or via another component, as recited in amended claim 56.

Thus, claim 56 is in condition for allowance.

Claim 57 is in condition for allowance because both claims 50 and 30 are in condition in allowance.

Withdrawal of this rejection is respectfully requested.

Claim 53 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jenkins* in view of *Henley* (U.S. Patent No. 5,432,461, hereafter *Henley*). Applicant respectfully traverses this rejection.

Henley teaches a test apparatus having a light source and an electro-optical element to detect light radiated by the light source (Figure 1, column 3 line 55). However, *Henley*, alone or in combination with *Jenkins*, does not teach or suggest a testing method set forth in claim 50 on which claim 53 depends.

Accordingly, the combination of *Jenkins* and *Henley*, does not teach or suggest a method for testing an optoelectronic device comprising a) making contact between an external control and an arrangement of test contact areas which are larger than operational contact areas, b) providing an input terminal of a drive circuit directly or via another component with input signals via the arrangement of test contact areas to generate a test pattern on a matrix of picture elements, wherein the drive circuit is

provided with signals for picture generation during operation via the operational contact areas connected to the input terminal of the drive circuit, and c) testing the picture elements of the matrix of picture elements, as recited in amended claim 50, and claims dependent thereon.

Thus, claim 53 is in condition for allowance. Withdrawal of this rejection is respectfully requested.

Claim 54 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jenkins et al* (U.S. Pat. 6,437,596) in view of *Kim* (U.S. Pat. 6,486,927, hereafter *Pat'927*). Applicant respectfully traverses the rejection.

Pat'927 teaches an LCD testing system (Abstract). However, *Pat'927*, alone or in combination with *Jenkins*, does not teach or suggest a testing method set forth in claim 50 on which claim 54 depends.

Accordingly, the combination of *Jenkins* and *Pat'927*, does not teach or suggest a method for testing an optoelectronic device comprising a) making contact between an external control and an arrangement of test contact areas which are larger than operational contact areas, b) providing an input terminal of a drive circuit directly or via another component with input signals via the arrangement of test contact areas to generate a test pattern on a matrix of picture elements, wherein the drive circuit is provided with signals for picture generation during operation via the operational contact areas connected to the input terminal of the drive circuit, and c) testing the picture elements of the matrix of picture elements, as recited in amended claim 50, and claims dependent thereon.

Thus, claim 54 is in condition for allowance. Withdrawal of this rejection is respectfully requested.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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